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AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A driving circuit for a flat panel display, the circuit comprising:

a latch unit to which is applied a control signal is applied from a shift register to

sequentially sample N-bitat least one digital picture signals signal and to store the digital picture

signalssignal, and the latch unit simultaneously outputting the sampled picture signalssignal by a

line pass signal; and

a voltage to current converting unit distributing an outer reference current to a plurality of

paths using a current mirror method, and supplying current of different a plurality of levels to a

data linesline of the display panel according to logical combinations of the sampled picture

signal signals which are applied from the latch unit, using a current mirror method.

2. (Currently Amended) The circuit of claim 1, wherein the latch unit comprises:

a first latch unit being applied the control signal from the shift register to sample and

store a-the digital picture signal having a plurality of bit numbers; and

a second latch unit outputting the digital picture signal sampled in the first latch unit

simultaneously according to an outerthe line-line pass signal.

3. (Original) The circuit of claim 1, wherein the shift register, the latch unit and the

voltage to current converting unit are formed in the display panel.

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4. (Original) The circuit of claim 1, wherein the display panel is an organic

electroluminescence display panel.

5. (Currently Amended) The circuit of claim 1, wherein the voltage to current converting

unit comprises:

a first switching unit for controlling a flow of a reference current by an enable signal;

a second switching unit connected to the first switching unit for controlling the flow of

the reference signal current by the enable signal; and

a first NMOS transistor for forming a reference path on which the reference current flows

between the first switching unit and ground by being applied the reference current on a gate

electrode thereof;

a plurality of NMOS transistors not including the first NMOS transistor for forming a

plurality of current paths in a parallel direction between the data line and the ground of the

display panel according to picture signals having a plurality of bit numbers by being applied the

reference signal on respective gate electrodes thereof; and

a plurality of switching units for controlling switching of the plurality of current paths by

being applied the sampled picture signal having the a plurality of bit numbers independently.

6. (Currently Amended) The circuit of claim 518, wherein the first NMOS transistor and

the plurality of NMOS transistors are poly-crystalline silicon thin film transistors (TFTs).

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7. (Original) The circuit of claim 5, wherein the first switching unit, second switching

unit and the plurality of switching units comprise NMOS transistors.

8. (Original) The circuit of claim 7, wherein each NMOS transistor is a poly-crystalline

silicon TFT.

9. (Original) The circuit of claim 5 further comprising a capacitor connected between the

second switching unit and ground for charging the reference current.

10. (Currently Amended) The circuit of claim 518, wherein the plurality of NMOS

transistors includes an NMOS transistor for resetting the gate electrodes of the first NMOS

transistor which forms the reference path and of the plurality of NMOS transistors which form

the plurality of current paths in a parallel direction to ground potential by a reset signal.

11. (Currently Amended) The circuit of claim 516, wherein the plurality of current paths

are formed to be the same as the bit numbers of the sampled picture signal.

12. (Currently Amended) The circuit of claim 516, wherein the plurality of current paths

are formed to be the same as the a number of logical combinations of the bits in of the sampled

picture signal.

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13. (Currently Amended) The circuit of claim 518, wherein the first NMOS transistor is

formed to have a ratio of channel width/length differently from those of the plurality of NMOS

transistors.

14. (Original) The circuit of claim 13, wherein the ratios of channel widths/lengths of the

plural NMOS transistors are made to be different from those of each other.

15. (Original) The circuit of claim 13, wherein the ratios of channel widths/lengths of the

plurality NMOS transistors are made to be the same as each other.

16. (New) The circuit of claim 1, wherein the voltage to current converting unit includes

a current mirror structure with a plurality of current paths.

17. (New) The circuit of claim 16, wherein the current mirror structure receives a

reference current and supplies the current of the plurality of levels selectively from at least one of

the plurality of current paths according to the logical combinations of the sampled picture signal.

18. (New) The circuit of claim 5, wherein the voltage to current converting unit further

includes:

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a first NMOS transistor for forming a reference path on which the reference current flows

between the first switching unit and ground by being applied the reference current on a gate

electrode thereof; and

a plurality of NMOS transistors not including the first NMOS transistor for forming the

plurality of current paths in a parallel direction between the data line and the ground of the

display panel according to the sampled picture signal having a plurality of bit numbers by being

applied the reference current on respective gate electrodes thereof.

19. (New) A flat panel display, comprising:

a substrate;

a plurality of pixel units located on the substrate; and

a data driving circuit located on the same substrate, the data driving circuit including a

plurality of current paths, the data driving circuit supplying current of a plurality of levels to at

least one of the plurality of pixel units by providing the current from at least one of the plurality

of current paths.

20. (New) The flat panel display of claim 19, wherein the data driving circuit includes a

current mirror structure on the same substrate, the current mirror structure receiving a reference

current to provide the current from the at least one of the plurality of current paths based upon

logical combinations of bits of a digital picture signal.

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21. (New) The flat panel display of claim 19, wherein the flat panel display is an organic electroluminescence display.